

5/16/2018

Print



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200

## Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	P D	
PO039766	MES002-VC	1	1	Net 30	M304TS0.750W.045	304 Sq Tube .75X.75X.049W : MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBING AS PER ASTM A554 MILL FINISH OR: ASTM A269 MILL FINISH receive ft				400	5/18/2018	160		S071984	Stock	5/16/2018	\$ 3.80 / ft	0		
		2			M304TS0.750W.065	304 Sq Tube .75X.75X.065W : MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBING AS PER ASTM A554 MILL FINISH OR: ASTM A269 MILL FINISH receive ft						400		S071985	Stock	5/16/2018	\$ 2.75 / ft	0		
		3			M304B1.500X1.500	M304 Bar 1.500 x 1.500 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft				12		12		S071986	Stock	5/16/2018	\$ 39.80 / ft	0		
		4			MT-4140-S- 1.000X10.000	AISI 4140 Steel Sheet/Plate							12		S071987	Stock	5/16/2018	\$ 88.60 / ft	0	
		5			MT-4140-S- 1.750X10.000								12		S071988	Stock	5/16/2018	\$ 151.68 / ft	0	
		6			MT-4140-S- 0.750X2.250	4140 Steel Bar 0.750 X 2.250 : MATL: AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395 receive ft				6		6		S071989	Stock	5/16/2018	\$ 20.67 / ft	0		
		7			MT-4140-S- 1.500X2.000	4140 Steel Bar 1.500 X 2.000 : MATL: AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395 receive ft						6		S071990	Stock	5/16/2018	\$ 28.99 / ft	0		
		8			M4140H-R0.375	4140 Round Bar .375 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434- BC/-A193-03- GRADE B7/-A29- 03/-A322-51 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft				12		15		S071991	Stock	5/16/2018	\$ 5.85 / ft	0		
Total:										860		623								



METAUX SOLUTIONS INC  
2625 BOUL JACQUES CARTIER EST  
LONGUEUIL, QUEBEC  
J4N 1L7  
Tel.: 450 641-3330

# Shipping Order

15/05/2018

Order : 134879  
Reference : 39766  
Bid : 27221  
Ship : PICK UP / PICK UP

Customer: 6323336

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

## Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
SSQT34340494	304 SQ TUBE .750 X .049 WALL 20 x 20' ***** ht:9H855	400	160	240
SSQT34340654	TUBE SS304 180 GRIT 3/4" X 3/4" X .065" 20 x 20' ***** ht:TS3041202	400	400	0
SSQ1124	304 SQU 1.500 1 x 12.5' ht:268423	12.5	12.5	0
MP141H	4140 HTSR PLATE 1.00" THICK 2 x 10" x 72" HT: PM94723	434	434	0
MP13441H	4140 HTRS PLATE 1.750" THICK 2 x 10" x 72" HT: PM94381	747	747	0
MP3441H	4140 HTSR TFA PLATE .750 THICK P.M 1 x 2.25" x 64" 1/4	40	40	0

\*\*\* Continued on Next Page \*\*\*



METAUX SOLUTIONS INC  
2625 BOUL JACQUES CARTIER EST  
LONGUEUIL, QUEBEC  
J4N 1L7

Tel. : 450 641-3330

Customer : 6323336

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

## Shipping Order

15/05/2018

Order : 134879  
Reference : 39766  
Bid : 27221  
Ship : PICK UP / PICK UP

### Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
MP11241H	HT: PM94680 4140 HTSR PLATE 1.5" THICK 1 x 2" x 72"	71	71	φ
MR3841H	HT: PM94823 4140 HTSR .375" DIA 1 X 4' 1 X 5' 1 X 6' ht:186784 ship journey collect jp	15	15	φ

3/4 jours

Shipping : \_\_\_\_\_  
Package No : \_\_\_\_\_  
Merchandise Received: \_\_\_\_\_  
Ref. : \_\_\_\_\_





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO039766**

**Supplier:** MES002-VC  
Metaux Solutions  
2625 boul Jacques-Cartier Est  
Longueuil  
QC  
J4N 1L7 Canada  
Phone: 800 558 8858  
Fax: 514 633 8044

**PO No:** PO039766

**PO Date:** 5/1/18

**Due Date:** 5/10/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**E-MAILED**  
MAY 01 2018

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pynt Terms:** Net 30

**Freight Terms:**

**Special Comments:** BID 27221

## **Items**

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M304TS0.750W.049		304 Sq Tube .75X.75X.049W : MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBING AS PER ASTM A554 MILL FINISH OR ASTM A269 MILL FINISH receive ft	Firmed	5/10/18	400 ft	0 ft	400 ft	\$3.80/ft	\$1,520.00
2	M304TS0.750W.065		304 Sq Tube .75X.75X.065W : MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBING AS PER ASTM A554 MILL FINISH OR ASTM A269 MILL FINISH receive ft	Firmed	5/10/18	400 ft	0 ft	400 ft	\$2.75/ft	\$1,100.00
3	M304B1.500X1.500		M304 Bar 1.500 x 1.500 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	5/10/18	12 ft	0 ft	12 ft	\$39.80/ft	\$477.60
4	MT-4140-S- 1.000X10.000		AISI 4140 Steel Sheet/Plate	Firmed	5/10/18	12 ft	0 ft	12 ft	\$88.6008333/ft	\$1,063.21

Plex 5/1/18 2:50 PM dart.lavoie.chantal



Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
Line Item Note 2 pcs cut at 6 ft length										
5	MT-4140-S-1.750X10.000		AISI 4140 Steel Sheet/Plate	Firmed	5/10/18	12 ft	0 ft	12 ft	\$151.67916/ft	\$1,820.15
MAY 16 2018										
Line Item Note 2 pcs cut at 6 ft length										
6	Mt-4140-S-0.750X2.250		4140 Steel Bar 0.750 X 2.250 : MAT'L: AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395 receive ft	Firmed	5/10/18	6 ft	0 ft	6 ft	\$20.6666/ft	\$124.00
MAY 16 2018										
7	MT-4140-S-1.500X2.000		4140 Steel Bar 1.500 X 2.000 : MAT'L: AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395 receive ft	Firmed	5/10/18	6 ft	0 ft	6 ft	\$28.991666/ft	\$173.95
MAY 16 2018										
8	M4140H-R0.375		4140 Round Bar .375 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434-BC/-A193-03- GRADE B7/-A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft	Firmed	5/10/18	12 ft	0 ft	12 ft	\$5.85/ft	\$70.20
MAY 16 2018										
Grand Total:										\$6,349.11

## Order Notes



## Order Notes

## Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.



Plex 5/1/18 2:50 PM dart.lavoie.chantal



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304150.750W.065

PO / BATCH NO.: 039766/5071985

DATE: MAY 16 2019

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 400'  
 QUANTITY INSPECTED: 400'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W.065  
 THICKNESS RECEIVED: W.065  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) (N)	
CORRECT MATERIAL PER M-DRAWING	(Y) (N)	<u>ASTM A554-14</u>
CORRECT THICKNESS	(Y) (N)	
PHOTO REQUIRED	(Y) (N)	
CORRECT REF # TO LINK CERT	(Y) (N)	<u>1/20/17 153041202</u>
CORRECT MATERIAL IDENTIFICATION	(Y) (N)	
CORRECT M# ON THE MATERIAL	(Y) (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>9-89</u> <u>MAY 16 2019</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



001738

COMPANY WITH QUALITY ASSURE SYSTEM  
ISO9001:2000

FOSHAN VINWAY STAINLESS STEEL CO., LTD.  
ADDRESS: ROAD SOUTH CHINA INDUSTRIAL BASE, DANGTOWN, NANHAI DISTRICT,  
FOSHAN CITY, GUANGDONG P.R. CHINA

TEL: 066-77660022 FAX: 066-77660022

CERTIFICATE 3.1 ACCORDING TO EN 10204

MILL TEST CERTIFICATE

ITEM	ITEM NO.	ITEM NAME	ITEM SIZE		ITEM WEIGHT		ITEM LENGTH		ITEM WIDTH		ITEM THICKNESS		ITEM TOLERANCE		ITEM GRADE	ITEM TYPE	ITEM DATE
			mm	inch	kg	lb	mm	inch	mm	inch	mm	inch	mm	inch			
1	783041202	1/2"X0.065	247	190	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
2	783041202	1/2"X0.065	122	122	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
3	783041119	6/8"X0.049	61	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
4	783041202	3/4"X0.065	168	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
5	783041202	3/4"X0.065	177	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
6	783041205	7/8"X0.065	102	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
7	783041202	1-1/4"X0.065	282	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
8	783041202	1-1/2"X0.065	190	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
9	783041202	1-1/2"X0.065	257	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
10	783041202	2"X0.065	41	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
11	783041202	2"X0.065	169	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
12	783041204	3"X0.12	30	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
13	783041202	3"X0.065	88	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
14	783041202	3/4"X0.065	102	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
15	783041202	1-1/4"X0.065	167	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
16	783041202	1-1/4"X0.065	30	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
17	783041202	1-1/2"X0.065	130	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
18	783041202	1-1/2"X0.065	110	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
19	783041202	5/8"X0.065	191	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
20	783041200	3"X0.065	110	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008
21	783041200	2-1/2"X0.065	144	180	20	0.040	0.305	0.940	0.0360	0.0031	0.022	18.150	0.715	0.021	304	179	2008

3.1 CERTIFICATE

1. This certificate is issued for the material described above and is valid only for the material described above. It is not valid for any other material.

2. The material described above has been inspected with free liquid penetrant inspection and found to be free of surface defects.

3. The material described above has been inspected with free liquid penetrant inspection and found to be free of surface defects.

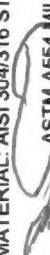
4. The material described above has been inspected with free liquid penetrant inspection and found to be free of surface defects.

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PURCHASE MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBING

FINISH:  ASTM A554 MILL FINISH  
OR ASTM A269 MILL FINISH

PART NUMBER: M304TS | A.AAA | W | TTT |  
| WIDTH | WALL |

PART NUMBER: EG. 0.75" X 0.75" X 0.049 WALL = M304TS0.750W 049

WHERE: A.AAA = WIDTH IN INCHES  
.TTT = WALL THICKNESS IN INCHES

RELEASED  
2014-05-26

D	"SEAMLESS" REMOVED FROM PURCHASE MATERIAL SPECIFICATION (SEE NCR14-3818)		DB	14.05.20
C	"SEAMLESS" ADDED TO PURCHASE MATERIAL. ASTM A269 ADDED TO FINISH. REASON: SPEC ADDED FOR 1/2" TUBING		AJS	05.10.10
B	DRAWING MOVED TO "B" SIZE BORDER. FINISH ADDED (SEE NCR 08-045 FOR DETAILS).		AJS	05.08.28
A	NEW ISSUE		DS	01.06.08
REV.	DESCRIPTION		BY	DATE
DESIGN	DS	DART AEROSPACE LTD		
DRAWN	DB	HAWESBURY, ONTARIO, CANADA		
CHECKED		DRAWING NO.	REV. D	
MFG. APPR.		M304TS	SHEET 1 OF 1	
APPROVED		TITLE	SCALE	
DE APPR.		304/316 SQUARE TUBING	NONE	
DATE	14.05.20		COPYRIGHT © 2001 BY DART AEROSPACE LTD	

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**COMPANY WITH QUALITY ASSURANCE**  
**ISO 9001:2008**

**POUSANG VENEER STAINLESS STEEL CO., LTD.**  
400-0001, POUSANG-RO, POUSANG-2DONG, SONGDO-KU, SEOUL, KOREA  
TEL: 02-262-0000 FAX: 02-262-0001

**FOR THE RECORD, COMMUNICATIONS & MEDIA**

**THE**

# THE NEW YORK TIMES

**THE UNIVERSITY OF CHICAGO PRESS**

[illegible]



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304BL 500X1500  
 DATE: MAY 16 2018

PO / BATCH NO.: 039266/5071986

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 12  
 QUANTITY INSPECTED: 12  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500  
 THICKNESS RECEIVED: 1.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	<u>Aston A276</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	<u>Heat# 268423</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: <u>DAS</u> <u>11</u>	SIGNED OFF BY: _____		
DATE: <u>MAY 16 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



**SPECIFICATION CONTROL DRAWING**

△ PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE  
(NOTE: AISI 303 NOT ACCEPTABLE)

△ SPECIFICATION: ASTM A276 OR ASTM A240  
PART NUMBER: M304BT-TTT | WWW.WWW |  
THICK | WIDTH

△ WHERE "T TTT" = THICKNESS IN INCHES  
AND "WWW.WWW" = WIDTH IN INCHES  
EG. 0.5" X 3.0" BAR = M304B0.500X3.000  
EG. 0.5" X 12.0" PLATE = M304B0.500X12.000

RELEASED  
2010-11-30  
JW

C	ADDED PLATE TO PURCHASE MATERIAL, ADDED PLATE RELATED SPECIFICATIONS, AND EG: CHANGED TITLE FROM "304/316 BAR TO 304/316 BAR/PLATE"	M8	10.11.25
B	REFORMAT DWG, ADD SPECS (2N D8-1)	CP	08.07.15
A	NEW ISSUE	PH	05.08.10
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.25		
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DESIGN NO.	DART AEROSPACE LTD	REV. C
DRAWING NO.	M304B	SHEET 1 OF 1
TITLE	304/316 BAR/PLATE	SCALE
		NTS





99812

Pagina - 1 di 2



**Acciaierie  
Valbruna** S.p.A.



**CERTIFICATO DI COLLAUDO  
ABNAHMEPRUEFZEUGNIS  
INSPECTION CERTIFICATE  
CERTIFICAT DE RECEPTION  
EN 10204 (2004), 3.1**

QUALITY MANAGEMENT SYSTEMS CERTIFIED BY LLOYD'S REGISTER

Cliente / Besteller/Kunden/Clijent

Avviso di spedizione:  
Lieferungsanweisung / Avis de livraison  
D-VI16001290

Certificato nr: MEST808705/2016/  
Prüfungsnr./Prüf-Nr.

Conferma ordine nr: E116000474  
Werkstoffbestätigung

Produttore: ACCIAIERIE VALBRUNA S.p.A.  
Hersteller/Hersteller/Produteur

Ordine Art: 47690 PENN PO19727  
Bestell-Nr./Bestell-Nr./Commande

Materiale di Provenienza:  
Herkunft des Werkstoffes  
Type steel  
Type of steel product

Stato di fornitura: Hot rolled - Annealed Cold Drawn  
Lieferzustand / Delivery state  
Etat de livraison

Tipo di Elaborazione: E+AOD  
Erstellungsbearbeitung/procédé de fabrication

Puntatore del Collaudo:  
Geprüfter des Werkstoffes  
Inspection certificate  
Inspection certificate



MRIS  
STATE  
RECEPTION

Intergranular corrosion test per ASTM A262 pract. E: ok.  
Absence of cracks at 20 x magnification after bend test.  
Reduction ratio = 20,3 : 1  
Annealing temperature: 1040°F for 1 h/water.  
Material is DFARS Compliant

Sollen alle zusätzlichen Anforderungen  
Die zusätzlichen Anforderungen sind in der Bestellung  
The material has been furnished in accordance with the requirements  
Le matériau a été fourni conformément aux exigences

Controlli anti-inquinamento: OK  
Umweltkontrollen: Umweltschutz/Reinigung  
Antipollution controls OK  
Controlli antiruggine: OK

Controlli visivi e dimensionali: soddisfatti esigenze  
Visuelle und dimensionale Kontrollen  
Visual inspection and dimensional checks satisfactory  
Controlli visivi e dimensionali: soddisfatti esigenze

Made and manufactured in Italy

No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.  
The Quality Management System is Certified acc. Pressure Equipment Directive 97/23/EC Annex 1, 2, 4.3 by TÜV and LLOYD'S  
Any act of falsification, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.  
Material and/or Valplus grade products are manufactured with special techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.  
The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any other different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna S.p.A. shall not be responsible for any improper use of the Product.

Vicenza, 21/01/16  
VCC000

(Mod. MCE)

Revisionsstelle des Abbinners / der Werkstoffprüfer / des Inspektors / L'agent d'usage

M. Rizzotto

Pagina - 2 di 2



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-R0.325  
 DATE: MAY 16 2018

PO / BATCH NO: 039766/S071991

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 15'  
 QUANTITY INSPECTED: 15'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.325  
 THICKNESS RECEIVED: 0.325  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) (N)	
CORROSION	(Y) (N)	
CORRECT GRAIN DIRECTION	(Y) (N)	
CORRECT MATERIAL PER M-DRAWING	(Y) (N)	Aston 304
CORRECT THICKNESS	(Y) (N)	
PHOTO REQUIRED	(Y) (N)	
CORRECT REF # TO LINK CERT	(Y) (N)	Heat # 186784
CORRECT MATERIAL IDENTIFICATION	(Y) (N)	
CORRECT M# ON THE MATERIAL	(Y) (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> DATE: <u>9-89 MAY 16 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in





**Métaux Solutions**

L'alliage de qualité et de rapidité !

2625, Boul. Jacques-Cartier Est  
Longueuil (Québec) J4N 1L7

info@metauxsolutions.com  
T 450 641-3330  
Ext : 1-800-967-2003

# CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

8 mai 2018

Description: 4142 CF HEAT TREATED S/R OR STRESS FREE BAR  
3/8 RD X 12' R/L Line Total: 23 LB  
HEAT: 186784 ITEM: 506029

## Specifications:

ASTM A434 CL BC 12  
ASTM A304 11  
ASTM A29 15  
EN 10204 3.1 04  
ASTM E112 13

ASTM A193 GR B7 15  
ASTM A322 13  
ASTM A962 14  
ASTM A255 10  
ASTM E381 01

ASTM A108 13  
ASTM A331 95  
MIC2016 12  
ASTM E10 15  
ASTM E709 14

## CHEMICAL ANALYSIS

C	MN	SI	P	S	CR	NI	MO
0.42	0.94	0.26	0.012	0.021	1.02	0.10	0.23
CU	AL	CA					
0.16	0.021	0.0009					

RCPT: R186462

COUNTRY OF ORIGIN : SPAIN

## MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
	KSI	KSI	IN 02 IN	IN AREA	BHN
	126.0	139.0	19.8	60.8	291

IDEAL DIAMETER : 6.426 IN GRAIN SIZE : 7 -

## CLEANLINESS

	A		B		C		D	
	THIN MAX	THICK MAX	THIN MAX	THICK MAX	THIN MAX	THICK MAX	THIN MAX	THICK MAX
E45	1.5	0.0	1.0	0.0	0.0	0.0	0.5	0.0





L'alliage de qualité et de rapidité !

2625, Boul. Jacques-Cartier Est  
Longueuil (Québec) J4N 1L7

[info@metauxsolutions.com](mailto:info@metauxsolutions.com)  
T 450 641-3330  
Ext : 1-800-967-2003

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

---

STRAND CAST      VACUUM DEGASSED  
MATERIAL IS FREE FROM MERCURY CONTAMINATION  
NO WELD REPAIR PERFORMED ON MATERIAL      EDDY CURRENT/MAGNETIC TEST PERFORMED  
THERMAL TREATMENT: OK  
QUENCHED 1562F 45 MINUTES  
OIL COOLED 95F START, 112F FINISH  
TEMPERED 1202F 150MINUTES, AIR COOLED  
MACRO: OK  
MICRO1: OK

---

COMMENTS

melt & mfg in USA  
free from harmful radioactive contamination  
red. ratio 305.9:1

---

COMMANDE : 134879

Métaux Solutions inc. certifie que les analyses sur ce document sont exactes et que le matériel rencontre les spécifications énumérées.

Préparé par





DESIGN [Signature]	DRAWN BY [Signature]	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. M4140H-R	REV. A SHEET 1 OF 1
DATE 05.02.21		TITLE 4140 ROUND BAR	SCALE 1:1
A	05.02.21	NEW ISSUE	

PURCHASE MATERIAL: AISI 4140H ROUND BAR

PER AISI 4140 OR ASTM A304-02 / -A-434-BC /

-A193-03-GRADE-B7 / -A29-03 / -A322-91 OR

UNS # - G41400

MINIMUM ULTIMATE TENSILE STRENGTH = 100 KSI

MINIMUM YIELD TENSILE STRENGTH = 66 KSI

PART NUMBER: M4140H-R | D.DDD | WHERE D.DDD = DIAMETER IN INCHES  
DIA

EG.  $\frac{7}{8}$ " ROUND BAR = M4140H-R0.875

RELEASED  
[Signature]

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M7-4140-S-1500X2.000

PO / BATCH NO.: 039766/5071970

DATE: MAY 16 2018

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 6'  
 QUANTITY INSPECTED: 6'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500  
 THICKNESS RECEIVED: 1.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	<u>As per A-829</u>
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	<u>Heat # Pm94823</u>
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>11</u> DATE: <u>9-69 MAY 16 2018</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
 1270, ABERDEEN STREET  
 HAWKESBURY, ONTARIO  
 K6A 1K7

11 mai 2018

MSP15000  
 1-1/2 X 34" X 146"

1.00 2,147.00 0.00  
 PLATE 4140/42 PREHARD

ASTM A-829  
 DFARS Compliant  
 PLATE# : 426495a  
 Country of Origin SLOVENIA

PM HEAT# : 94823 BHN 294.00

C - 0.4000	Mn - 0.7800	P - 0.0080	S - 0.0005	Si - 0.2340	Ni - 0.1000
Cr - 0.9800	Mo - 0.1500	Cu - 0.2020	V - 0.0330		

ITEM 7: 1 X 2" X 72"

COMMANDE : 134879

REF : 39766

Métaux Solutions inc. certifie que les analyses sur ce document sont exactes et que le matériel rencontre les spécifications énumérées.

Préparé par

*[Signature]*



**SPECIFICATION CONTROL DRAWING**

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE  
MINIMUM ROCKWELL C = 28 Rc  
MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: ASTM A829, AMS 6395

PART NUMBER: MT-4140-S-[T.TTT] x [W.WWW]  
WHERE "T.TTT" = THICKNESS IN INCHES  
WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063  
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

<b>JART</b> AEROSPACE		Hamilton, Ontario, Canada	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO	REV	A	
MT-4140-S			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS DIMENSIONS APPLY AFTER FINISHING			
DESIGNED BY:	INITIALS AND DATE		
VM 2/13/2018			
DRAWN BY:	INITIALS AND DATE		
VM 02/13/2018			
CHECKED BY:	INITIALS AND DATE		
VM 02/13/2018			
INFO REVIEW BY:	INITIALS AND DATE		
ML 02/13/2018			
SCALE: NTS		SHEET 1 OF 1	
1:1			
THIS DOCUMENT IS THE PROPERTY OF JART AEROSPACE. IT IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED IN THE ORDER. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			

**SPECIFICATION:** ASTM A829, AMS 6395

EX. 0.063" THICK SHEET = MT-4140-S-0.063  
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

[illegible]



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-S-0.750x2.250

PO / BATCH NO.: 039766/5071989

DATE: MAY 16 2019

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 61  
 QUANTITY INSPECTED: 61  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750  
 THICKNESS RECEIVED: 0.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORROSION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	<u>As per A-829</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
PHOTO REQUIRED	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	<u>Heat # Pm 94680</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: <u>DAS</u> <u>11</u>	SIGNED OFF BY: _____		
DATE: <u>9-MAY 16 2019</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in







CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

11 mai 2018

MSP07500 1.00 1,075.00 0.00  
3/4 X 33 3/4" X 144 15/16" PLATE 4140/42 PREH  
ASTM A-829  
DFARS Compliant  
PLATE#: 425347b PM HEAT#: 94680 BHN 318.00  
Country of Origin SLOVENIA  
C - 0.4000 Mn - 0.7840 P - 0.0080 S - 0.0006 Si - 0.2120 Ni - 0.1300  
Cr - 0.9800 Mo - 0.1600 Cu - 0.2010 V - 0.0410

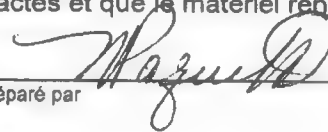
ITEM 6: 1 X 2.25" X 64"1/4

COMMANDE : 134879

REF : 39766

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Préparé par





# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-5-1.50X10.000

PO / BATCH NO.: 039766/5071988

DATE: MAY 16 2018

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 12'  
 QUANTITY INSPECTED: 12'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.750  
 THICKNESS RECEIVED: 1.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>As per A829</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>Heat # Pm94381</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>11</u> DATE: <u>2-05</u> <u>MAY 16 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE  
MINIMUM ROCKWELL C = 28 Rc  
MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: ASTM A829, AMS 6395

PART NUMBER: MT-4140-S-[T.TTT] x [W.WWW]  
WHERE "T.TTT" = THICKNESS IN INCHES  
WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063  
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

REV	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-544	18.2.13	VM	ML

<b>DART</b> AEROSPACE		Markham, Ontario, Canada	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO	MT-4140-S	REV	A
TOOLING DIMENSIONS ARE GIVEN TO DIMENSIONS ARE SHOWN DIMENSIONS ARE SHOWN DIMENSIONS ARE SHOWN			
DESIGNED BY: VM 2/13/2018			
DRAWN BY: VM 02/13/2018			
CHECKED BY: VM 02/13/2018			
MFG REVIEW BY: DD 02/13/2018			
APPROVED BY: ML 02/14/2018			
SCALE: NTS			
SHEET 1 OF 1			
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CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

11 mai 2018

**Product Description**

MSP17500

1-3/4 X 34 1/4" X 146 1/8"

ASTM A-829

DFARS Compliant

PLATE#: 421477B

Country of Origin SLOVENIA

C - 0.4100 Mn - 0.7910  
Cr - 0.9900 Mo - 0.1500

**Shipped Pcs**  
1.00

**Shipped Lbs**  
2,519.00

**Back Ordred**  
0.00

**PO LINE**

PLATE 4140/42 PREH.

PM HEAT#: 94381

BHN 295.00

P - 0.0070 S - 0.0003 Si - 0.2460 Ni - 0.2000  
Cu - 0.2230 V - 0.0340

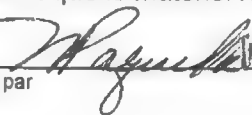
ITEM 5: 2 X 10" X 72"

COMMANDE : 134879

REF : 39766

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Préparé par





# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT 4140-5-1.000X10.000  
 DATE: MAY 16 2019

PO / BATCH NO.: Q39766/5071987

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 12'  
 QUANTITY INSPECTED: 12'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000  
 THICKNESS RECEIVED: 1.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	Astm A829
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	Heat # Pm94723
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>11</u>	SIGNED OFF BY: _____		
DATE: <u>MAY 16 2019</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
 1270, ABERDEEN STREET  
 HAWKESBURY, ONTARIO  
 K6A 1K7

11 mai 2018

MSP10000  
 1 X 34 1/16" X 146"

1.00

1,446.00

0.00

PLATE 4140/42 PREHARD

ASTM A-829  
 DFARS Compliant  
 PLATE# : 425896A  
 Country of Origin SLOVENIA

PM HEAT# :

94723

BHN 300.00

C -	0.4050	Mn -	0.7560	P -	0.0080	S -	0.0010	Si -	0.2250	Ni -	0.1300
Cr -	0.9700	Mo -	0.1500	Cu -	0.2250	V -	0.0400				

ITEM 4: 2 X 10" X 72"

COMMANDE : 134879

REF : 39766

Métaux Solutions inc. certifie que les analyses sur ce document sont exactes et que le matériel rencontre les spécifications énumérées.

Préparé par

*[Signature]*



REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-544	18.2.13	VM	ML

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE  
 MINIMUM ROCKWELL C = 28 Rc  
 MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: *del* ASTM A829/AMS 6395

PART NUMBER: MT-4140-S-(T.TTT) x (W.WWW)  
 WHERE "T.TTT" = THICKNESS IN INCHES  
 WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063  
 EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

<b>DART AEROSPACE</b> Newmarket, Ontario, Canada	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE	
PART NO. MT-4140-S	REV. A
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS FOR ALUMINUM ARE IN INCHES DIMENSIONS FOR STEEL ARE IN INCHES	
DESIGNED BY: VM 21/3/2018	INITIALS AND DATE VM 21/3/2018
DRAWN BY: VM 02/13/2018	XXL 1.05
CHECKED BY: VM 02/13/2018	XX 1.01
MFG REVIEW BY: DD 02/13/2018	XX 1.01
APPROVED BY: ML 02/14/2018	SCALE: NTS
SHEET 1 OF 1	
COPYRIGHT © 2018 BY DART AEROSPACE LTD	
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304+50.730W.049  
DATE: MAY 16 2018

PO / BATCH NO.: 039766/5071984

MATERIAL CERT REC'D: YES  
QUANTITY RECEIVED: 160'  
QUANTITY INSPECTED: 160'  
QUANTITY REJECTED: 0

THICKNESS ORDERED: W.049  
THICKNESS RECEIVED: W.049  
SHEET SIZE ORDERED: N/A  
SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) (N)	
CORRECT MATERIAL PER M-DRAWING	(Y) (N)	Aston A554-10
CORRECT THICKNESS	(Y) (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) (N)	Heat # 9H855
CORRECT MATERIAL IDENTIFICATION	(Y) (N)	
CORRECT M# ON THE MATERIAL	(Y) (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>9-89</u>	SIGNED OFF BY: _____		
DATE: <u>MAY 16 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



PURCHASE MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBING

FINISH:

ASTM A554 MILL FINISH  
OR ASTM A269 MILL FINISH

PART NUMBER:

M304TS/A.AAA W.TTT  
| WIDTH | WALL |

PART NUMBER:

EG. 0.75" X 0.75" X 0.049 WALL = M304TS0.750W.049

WHERE:

A.AAA = WIDTH IN INCHES  
.TTT = WALL THICKNESS IN INCHES

D	"SEAMLESS" REMOVED FROM PURCHASE MATERIAL SPECIFICATION (SEE NCR14-3818)			DS	14.05.20
C	"SEAMLESS" ADDED TO PURCHASE MATERIAL. ASTM A269 ADDED TO FINISH. REASON: SPEC ADDED FOR 1/2" TUBING			AJS	08.10.16
B	DRAWING MOVED TO "B" SIZE BORDER. FINISH ADDED (SEE NCR 08-045 FOR DETAILS)			AJS	08.08.28
A	NEW ISSUE			DS	01.06.08
REV.	DESCRIPTION			BY	DATE
DESIGN	DS	DART AEROSPACE LTD			
DRAWN	DS	HAWKESBURY, ONTARIO, CANADA			
CHECKED	DS	DRAWING NO.			
MFG. APPR.	M304TS	REV. D			
APPROVED		SHEET 1 OF 1			
DE APPR.		SCALE			
DATE	14.05.20	NONE			

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RELEASED  
2016-05-26



# Kingmaker Steel Co., Inc.

## Stainless Steel Tube and Pipe

133 Belmont Drive, Somerset, NJ 08873-1203  
Tel.: (732) 302-1800, Fax: (732) 302-1822

001556

Date: 1/11/2018  
Invoice No: KM2018/0105  
Purchase P009302  
Order No:  
Sold To:

### Material Certification

ISO 9001:2015  
ISO 14001:2004  
EN 10204/3.1B

Ship To:

Stainless Steel T.I.G. Welded Tubing.

Country of Melt: Taiwan, Country of Origin: Taiwan.

Item	Description	Heat No.	Finish	Specification	Grade
1:	3/4" SQ X 0.049"W X 20'	9H855	MF	ASTM A554-16	MT-304
2:	3/4" SQ X 0.120"W X 20'	5H982	MF	ASTM A554-16	MT-304
3:	1-1/2" SQ X 0.180"W X 20'	5G289	MF	ASTM A554-16	MT-304
4:	2" SQ X 0.180"W X 20'	5H035	MF	ASTM A554-16	MT-304
5:	3" SQ X 0.120"W X 20'	TBH100713	MF	ASTM A554-16	MT-304

### CHEMICAL PROPERTIES

	C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu
1:	.015	.430	1.10	.035	.003	18.21	8.07			
2:	.020	.390	1.43	.029	.010	18.05	8.03			
3:	.018	.390	1.38	.033	.004	18.27	8.05			
4:	.024	.370	1.43	.031	.005	18.19	8.04			
5:	.028	.430	1.21	.033	.003	18.20	8.09			

### MECHANICAL PROPERTIES

	Tensile (N/mm2)	Yield (N/mm2)	Elong. (%)	Hardness (HRB)	Flattening	Hydrostatic	Eddy Current
1:	698.00	352.00	46.00	89.50			
2:	641.00	297.00	53.00	86.00			
3:	654.00	327.00	52.00	89.00			
4:	628.00	292.00	53.00	85.00			
5:	668.00	326.00	51.00	88.00			

WE HEREBY CERTIFY THAT TO THE BEST OF OUR KNOWLEDGE, THE MATERIAL LISTED ABOVE HAS BEEN MANUFACTURED IN ACCORDANCE WITH AND MEET THE ABOVE APPLICABLE SPECIFICATIONS AND GRADES, AND ALSO THAT THE MATERIAL WAS PRODUCED IN A MERCURY FREE ENVIRONMENT. THE CHEMICAL COMPOSITIONS OF THE MATERIAL ARE IN ACCORDANCE WITH ASTM A240.